

18 August 2000

LENA State Log

<u>time (UT)</u>	<u>event</u>
00 085 21:30:34 (25 Mar)	launch
087 06:00 (27 Mar)	instrument on –liveness test
18:00	instrument off
112 16:13 (21 Apr)	instrument on
115 14:40 (24 Apr)	set overcount threshold to 2AF8
14:52	HVPS unsafed
14:53	normal mode implemented
15:03	voltage thresholds to AA AA 74 74 51
15:04	current thresholds to FFx5
15:14	start/stop CFDs to level 8
15:19	start/stop MCPs to level 0
15:30	start/stop MCPs enabled
15:37	start/stop MCPs to level 20
15:44	start/stop MCPs to level 40
15:51	start/stop MCPs to level 50
16:01	start/stop MCPs to level 60
16:08	voltage thresholds to D5 D5 91 91 73
16:09	start/stop MCPs to level 70
16:17	start/stop MCPs to level 80
16:31	start/stop MCPs to level 88
16:42	start/stop MCPs to level 90
116 03:20 (25 Apr)	overcount pushes start/stop MCPs to level 7C
16:28-18:36 (?)	overcount pushes start/stop MCPs to level 72
119 12:12 (28 Apr)	start/stop MCPs to level 80
12:19	start/stop MCPs to level 88
12:23	start/stop MCPs to level 90
12:40	coll plus/coll minus to level 0
12:53	coll plus/coll minus enabled
13:00	coll plus/coll minus to level 10 (+/- 2.4)
13:13	coll plus/coll minus to level 20 (+/- 2.7)
13:27	coll plus/coll minus to level 30 (+/- 3.2)
13:46	coll plus/coll minus to level 40 (+/- 3.6)
13:59	coll plus/coll minus to level 50 (+/- 4.1)
14:07	coll plus/coll minus to level 60 (+/- 4.4)
14:24-18:14	overcount pushes start/stop MCPs to level 72 and coll plus/minus to level 72
19:07	set overcount threshold to FFFF (disabled)
19:11	start/stop MCPs to level 80
19:19	start/stop MCPs to level 88
19:29	start/stop MCPs to level 90
120 18:42 (29 Apr)	start/stop CFDs to level 2/6 (Denver levels)

122 23:51 (1 May)	stop MCP to level 50
23:59	stop MCP to level 60
123 00:06 (2 May)	stop MCP to level 70
00:17	stop MCP to level 80
124 01:40 (3 May)	optics to level 0
01:48	optics enabled
02:08	optics to level 10
02:21	optics to level 20
02:38	optics to level 30
03:00	optics to level 40
03:14	optics to level 50
03:32	voltage thresholds to D5 D5 91 91 86
03:45	optics to level 60
04:13	optics to level 68
04:33	voltage thresholds to D5 D5 91 91 97
04:38	optics to level 70
04:53	optics to level 78
126 21:13 (5 May)	set position sensing to low gain
148 11:07 (27 May)	set steering controller to level 0
11:13	enabled steering controller stepping table
11:23	disabled steering controller stepping table
11:33	set steering controller to level 20
11:43	set steering controller to level 40
12:05	set steering controller to level 60
12:25	set steering controller to level 80
155 02:52 (3 June)	redefine mass 1 bin to 27-2B (bin 156-175)
02:54	stop MCP to level 90
03:53	coll plus/coll minus to level 10 (+/- 2.4)
04:07	coll plus/coll minus to level 20 (+/- 2.7)
04:22	coll plus/coll minus to level 30 (+/- 3.2)
04:37	coll plus/coll minus to level 40 (+/- 3.6)
04:52	coll plus/coll minus to level 50 (+/- 4.1)
05:10	coll plus/coll minus to level 60 (+/- 4.4)
10:10	*** start of uploaded commanding ***
16:40	*** all S/T's including LENA safed ***
156 18:33 (4 June)	instrument on
18:56	HVPS unsafed
18:57	normal mode implemented
19:02	voltage thresholds to AA AA 74 74 51
	current thresholds to FFx5
	MCP's, optics and coll to level 0
19:08	MCP's, optics and coll enabled
19:43	set overcount threshold to FFFF (disabled)
19:51	start/stop CFDs to level 2/6 (Denver levels)
19:53	set position sensing to low gain
19:53	set steering controller to level 0

19:55	redefine mass 1 bin to 27-2B (bin 156-175)
20:03	MCP's to level 20, coll/optics to level 10
20:11	MCP's to level 40
20:22	MCP's to level 50
157 18:06 (5 June)	coll/optics to level 20
18:12	MCP's to level 60
18:21	voltage thresholds to D5 D5 91 91 73
18:21	MCP's to level 70, coll/optics to level 30
18:42	MCP's to level 80, coll/optics to level 40
18:53	start MCP to level 88
19:00	coll/optics to level 50
19:06	start MCP to level 90
158 22:29 (6 June)	voltage thresholds to D5 D5 91 91 86
22:29	optics to level 60
22:39	optics to level 68, coll to level 60
22:48	voltage thresholds to D5 D5 91 91 97
22:49	optics to level 70
23:34	optics to level 78
23:40	stop MCP to level 88
23:47	stop MCP to level 90
159 10:10 (7 June)	*** start of uploaded commanding ***
161 22:00 (9 June)	redefine mass bin 1 to 0-7F and mass bin 2 to 80-FF
22:01	stop MCP to level 90
169 12:10 (17 June)	*** all S/I's including LENA safed ***
172 02:07 (20 June)	instrument on
02:27	HVPS unsafed
02:27	normal mode implemented
02:32	voltage thresholds to AA AA 74 74 51
	current thresholds to FFx5
	MCP's, optics and coll to level 0
02:38	MCP's, optics and coll enabled
173 03:01 (21 June)	MCP's to level 20, coll/optics to level 10
03:07	set overcount threshold to level FFFF (disabled)
03:08	start/stop CFDs to level 2/6 (Denver levels)
03:10	set position sensing gain to low
03:15	MCP's to level 40
03:24	MCP's to level 50
03:30	coll/optics to level 20
03:37	MCP's to level 60
03:45	voltage thresholds to D5 D5 91 91 73
	MCP's to level 70, coll/optics to level 30
03:53	MCP's to level 80, coll/optics to level 40
04:01	MCP's to level 88
04:11	coll/optics to level 50
04:17	MCP's to level 90
04:23	voltage thresholds to D5 D5 91 91 86

04:29	optics to level 68, coll to level 60
04:34	voltage thresholds to D5 D5 91 91 97
	optics to level 70
04:38	optics to level 78
04:43	optics to level 80 (12.1 kV)
15:46	*** start of uploaded commanding ***
176 05:14 (24 June)	HVPS error flag reset (no impact error)
180 19:55 (28 June)	HVPS error flag reset (no impact error)
195 15:20 (13 July)	HVPS error flag reset (no impact error)
196 16:50 (14 July)	coll plus/coll minus lowered to level 00 due to overcount
	optics lowered to level 76 (11.3 kV) due to overcount
213 00:28 (31 July)	uploaded LENA FSW V3.3 to CIDP
00:49	optics to level 33
00:53	global off (all supplies to 00, disabled and safed)
00:58	instrument reset sent
01:35	instrument reset sent
02:06	uploaded LENA FSW V3.3 to CIDP (reversing header byte order)
02:23	instrument reset sent
02:42	CIDP commanded LENA off
02:44	instrument on
03:00	uploaded LENA FSW V3.3 to CIDP
03:17	CIDP commanded LENA off
03:20	instrument on
03:37	uploaded LENA FSW V3.3 to CIDP (using old header byte order)
03:55	instrument reset sent
0413	HVPS unsafed
	normal mode implemented
04:19	voltage thresholds to AA AA 74 74 51
	current thresholds to FFx5
04:20	MCP's, optics and coll to level 0
04:25	MCP's, optics and coll enabled
04:31	MCP's to level 20, optics to level 10
04:36	MCP's to level 40
04:40	MCP's to level 50
04:53	optics to level 20
04:56	MCP's to level 60
05:01	voltage thresholds to D5 D5 91 91 73
05:02	MCP's to level 70, optics to level 30
05:07	MCP's to level 80, optics to level 40
05:12	MCP's to level 88
05:17	optics to level 50
05:21	MCP's to level 90
05:25	voltage thresholds to D5 D5 91 91 86
05:26	optics to level 60
05:29	optics to level 68
05:33	voltage thresholds to D5 D5 91 91 97

05:34	optics to level 70
05:37	optics to level 78
05:42	optics to level 80
05:47	collimators enabled (+/- 1.8)
05:56	coll to level 10 (+/- 2.4)
06:00	coll to level 20 (+/- 2.7)
06:04	coll to level 30 (+/- 3.2)
06:08	coll to level 40 (+/- 3.6)
06:12	coll to level 50 (+/- 4.1)
06:17	coll to level 60 (+/- 4.4)
06:18	*** end of uploaded commanding *** (deleted queue)
06:21	saved MCP stop supply state
06:27	set overcount threshold to level 0023 (296 kHz)
06:33	set overcount threshold to level 0017 (194 kHz)
06:37	enabled stop MCP overcount auto restore
214 18:52 (1 August)	set overcount threshold to level 000B (93 kHz)
18:56	set memory read to 05 A0 01 00 (engineering data)
230 20:09 (17 August)	set memory read to 20 2D 01 00 (A111 amplitude data)